What is claimed is:

1 ~~1.   A method for rendering~~ an image on a display and producing magnification in the

2 rendered image comprising:

3 selecting a set of polygon data to which to apply the magnification special effect;

4 retaining eye point δ angle data within the vertex data passed to the a graphics

5 rendering pipeline;

6 perturbing each eye point δ angle value at each polygon fragment; and

7 incorporating perturbed texel angles, where each texel has a U and a V

8 coordinate.

1 2.   The method according to claim 1 wherein perturbing each eye point δ angle value

2 comprises multiplying eye point δ angle by a value N, and providing a corresponding

3 offset to each texel coordinate.

1 3.   The method according to claim 1 wherein the texel coordinates are offset by an

2 eye point angle.

1 4.   The method according to claim 3 wherein the texel coordinates are offset by the

2 eye point angle and by a value N.

1 5.   A method according to claim 3 wherein accessing eye point δ angle data for each

2 texel to be produced comprises accessing data for selected vertices describing a polygon

3 and further comprising interpolating eye point δ angle data for each texel to be produced

4 between texels including said vertices.

1 6.   The method according to claim 5 further comprising resolving an eye point δ

2 angle into eye point δ angle x in an X-Z plane and eye point δ angle y in a Y-Z plane.

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1   7.   The method according to claim 6 wherein comprising producing magnification

2   for a selected polygon on said display comprises displaying texels in the selected

3   polygon and selecting texels based on the modified U and V mapping derived through

4   using the eye point angles.

1   8.   A machine-readable medium that provides instructions which, when executed by

2   a processor, cause said processor to perform operations producing a magnifying special

3   effect in a computer display comprising:

4   selecting a set of polygon data to which to apply the magnification special effect;

5   retaining eye point δ angle data within the vertex data passed to the graphics

6   rendering pipeline;

7   perturbing each eye point δ angle value at each polygon fragment; and

8   providing perturbed texel angle data.

1   9.   A machine-readable medium according to claim 8 that provides instructions

2   which, when executed by a processor, cause said processor to perform operations

3   perturbing texel coordinates U and V using eye point δ angle value comprises

4   multiplying eye point δ angle by a value N.

1   10.   A machine-readable medium according to claim 9 that provides instructions

2   which, when executed by a processor, cause said processor to perform operations

3   accessing data for the set of vertices describing a polygons and interpolating eye point δ

4   angle data for each texel to be produced between texels including said vertices.

1   11.   A machine-readable medium according to claim 10 that provides instructions

2   which, when executed by a processor, cause said processor to perform resolving an eye

3   point δ angle into eye point δ angle x in an X-Z plane and eye point δ angle y in a Y-Z

4   plane.

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1 12. A machine-readable medium according to claim 10 that provides instructions
2 which, when executed by a processor, cause said processor to perform operations
3 comprising producing magnification for a selected area of said display by modifying the
4 U and V texel coordinates by offsetting them with the eye point angle x and y
5 components.

1 13. A graphics pipeline converting polygon data to display data and further
2 comprising a means to modify to texel coordinates according to eye point δ angles to
3 allow a portion of a rendered image generated from the polygon data to have a
4 magnification effect applied.

1 14. The graphics pipeline according to claim 13 wherein said processor comprises a
2 multiplier system for establishing relationship projection angle = N eye point δ value.

1 15. The graphics pipeline of Claim 13 further comprising means applying the
2 magnifying effect only to selected polygons.